

## CLAIMS

We Claim:

- 1           1. A diagnostic tool comprising:
  - 2           a fax test module, the fax test module including:
    - 3               a telephone connector,
    - 4               a fax modem module, and
    - 5               a phone line emulator;
    - 6           a display; and,
    - 7           a processor that causes menus to be shown on the display, the menus
    - 8           allowing a user to select tests to be performed on a device under test, the tests
    - 9           including:
      - 10               a send fax test, and
      - 11               a receive fax test;
    - 12           wherein the menus list devices that can be tested by the diagnostic tool;
    - 13           and,
    - 14           wherein the menus list at least one device that does not have fax
    - 15           capability and at least one device that does have fax capability.
  - 1           2. A diagnostic tool as in claim 1 wherein
    - 2           the menus additionally include a select test menu and a select product
    - 3           menu.

1           3. A diagnostic tool comprising:

2           an expansion port;

3           a fax test module connected to the expansion port, the fax test module

4 including:

5           a telephone connector,

6           a fax modem module, and

7           a phone line emulator;

8           a display; and,

9           a processor that causes menus to be shown on the display, the menus

10 allowing a user to select tests to be performed on a device under test, the tests

11 including:

12           a send fax test, and

13           a receive fax test.

1           4. A diagnostic tool as in claim 3 wherein

2           the menus include a select product menu and a select test menu.

1           5. A diagnostic tool as in claim 3 wherein

2           the menus include a select category menu, a select product menu and a

3 select test menu.

1           6. A diagnostic tool as in claim 3 wherein

2            wherein the menus list devices that can be tested by the diagnostic tool;  
3    and,  
4            wherein the menus list at least one device that does not have fax  
5    capability and at least one device that does have fax capability.

1            7. A handheld diagnostic tool comprising:  
2            power circuitry based on power supplied by battery;  
3            a fax test module connected to the expansion port, the fax test module  
4    including:  
5            a telephone connector,  
6            a fax modem module, and  
7            a phone line emulator;  
8            a display; and,  
9            a processor that causes menus to be shown on the display, the menus  
10    allowing a user to select tests to be performed on a device under test, the tests  
11    including:  
12            a send fax test, and  
13            a receive fax test.

1            8. A handheld diagnostic tool as in claim 7 wherein  
2            the menus include a select product menu and a select test menu.

1           9. A handheld diagnostic tool as in claim 7 wherein  
2           the menus include a select category menu, a select product menu and a  
3           select test menu.

1           10. A diagnostic tool as in claim 7 wherein  
2           wherein the menus list devices that can be tested by the diagnostic tool;  
3           and,  
4           wherein the menus list at least one device that does not have fax  
5           capability and at least one device that does have fax capability.

1           11. A method for testing a device under test (DUT) wherein the DUT  
2           includes fax capability, the method comprising:  
3           connecting a cable from the DUT to a diagnostic tool; and,  
4           sending a fax from the diagnostic tool to the DUT, including the  
5           following:  
6                    emulating, by the diagnostic device over the cable, a phone line to  
7           the DUT,  
8                    performing fax transmission of data from the diagnostic tool to  
9           the DUT, and  
10           terminating the fax transmission.

1           12. A method as in claim 11 wherein emulating the phone line includes  
2 the following:

3           producing an alert signal.

1           13. A method as in claim 11 additionally comprising the following  
2 performed before sending the fax:

3           selecting by a user the device under test from a plurality of devices  
4 listed on a menu by the diagnostic tool, the plurality of devices including at  
5 least one device that does not have fax capability and at least one device that  
6 does have fax capability.

1           14. A method for testing a device under test (DUT) wherein the DUT  
2 includes fax capability, the method comprising:

3           connecting a cable from the DUT to a diagnostic tool; and,

4           sending a fax from the DUT to the diagnostic tool, including the  
5 following:

6                   emulating, by the diagnostic device over the cable, a phone line to  
7 the DUT,

8                   performing fax transmission of data from the DUT to the  
9 diagnostic tool, and

10           terminating the fax transmission.

1           15. A method as in claim 14 wherein emulating the phone line includes  
2 the following:

3           producing a dial tone; and,  
4           receiving a dialed number.

1           16. A method as in claim 14 additionally comprising the following  
2 performed before sending the fax:

3           selecting by a user the device under test from a plurality of devices  
4 listed on a menu by the diagnostic tool, the plurality of devices including at  
5 least one device that does not have fax capability and at least one device that  
6 does have fax capability.

1           17. A method as in claim 14 additionally comprising:

2           sending a fax from the diagnostic tool to the DUT, including the  
3 following:

4                   emulating again, by the diagnostic device, a phone line to the  
5 DUT,

6                   performing fax transmission of data from the diagnostic tool to  
7 the DUT, and

8                   terminating the fax transmission.

1           18. A method as in claim 17 wherein emulating again the phone line  
2 includes the following:  
3           producing an alert signal.

1           19. A method as in claim 17 additionally comprising the following  
2 performed before sending the fax:  
3           selecting by a user the device under test from a plurality of devices  
4 listed on a menu by the diagnostic tool, the plurality of devices including at  
5 least one device that does not have fax capability and at least one device that  
6 does have fax capability.

1           20. A diagnostic tool comprising:  
2           a module means for sending and receiving fax, the module means  
3 including:  
4           connector means for providing a telephone connection,  
5           fax means for producing and receiving fax transmissions, and  
6           emulator means for emulating a phone line;  
7           display means for displaying menus to a user; and,  
8           processing means for controlling display of the menus by the display  
9 means, the menus allowing the user to select tests to be performed on a device  
10 under test, the tests including:  
11           a send fax test, and

12                   a receive fax test;  
13           wherein the menus list devices that can be tested by the diagnostic tool;  
14   and,  
15           wherein the menus list at least one device that does not have fax  
16   capability and at least one device that does have fax capability.